

Research Report

What Do Individual Development Accounts Cost? The First Three Years at CAPTC

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Center for Social Development



George Warren Brown School of Social Work

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Abstract

What do Individual Development Accounts (IDAs) cost? As a follow-up to Schreiner (2000a), this paper estimates the value of resources used in the first 33 months of an IDA program at the Community Action Project of Tulsa County (CAPTC). As a financial-cost analysis, the paper makes no attempt to measure costs that cannot be straightforwardly valued in financial terms nor to measure benefits of any kind. Subject to a standard set of caveats and qualifications, four results emerge. First, the social cost (excluding matches) of the production of a participant-month was about \$64. Second, given that IDA participants had net deposits of about \$29 per month, each dollar saved had a social cost of about \$2.20. Third, given an average match rate of about 1.5:1, IDAs produced a dollar of asset accumulation at a social cost of about \$1.50. Fourth, average costs at CAPTC were lower in the first 33 months than in the first 15 months, but they are unlikely to fall much further.

Acknowledgments

I am thankful for help and comments from Margaret Clancy, Robert Friedman, Lissa Johnson, Greg Mills, and Michael Sherraden and for financial support from the Division of Asset Building and Community Development of the Ford Foundation. I am also grateful for extensive support from the staff at the experimental IDA program at CAPTC: Kim Cowden, Leisa Crawford, Steven Dow, Patrick Forster, Karen Gibbons, Danny Snow, and especially Virilyaih Davis and Jennifer Robey.

1. Introduction

It is good to have assets, especially if you are poor (HM Treasury, 2001; Schreiner *et al.*, 2001; Shapiro and Wolff, 2001; Goldberg and Cohen, 2000; Ackerman and Alstott, 1999; Conley, 1999; Oliver and Shapiro, 1995; Sherraden, 1991; Friedman, 1988; Haveman, 1988; Sherraden, 1988). But if the poor are to accumulate assets faster, then they need help. What would this help cost society?

This paper looks at the costs of Individual Development Accounts (IDAs) at the experimental program of the Community Action Project of Tulsa County (CAPTC). IDAs are designed to address institutional constraints on asset accumulation by the poor. Withdrawals from IDAs are matched if used for home ownership, post-secondary education, or microenterprise.¹ IDAs also bundle other services meant to facilitate saving, including financial education and support from peers and from program staff.

This financial-cost analysis is but one part of the overall evaluation in the American Dream Demonstration of the effectiveness of IDAs. The overall evaluation—like the cost analysis—considers the points of view of seven groups of stakeholders: IDA participants, non-participants, the federal government, state and local government, the employees of IDA programs, private donors, and society as a whole (Schreiner, 2000a). The most important point of view is that of society.

¹ CAPTC also matches withdrawals invested in retirement accounts, and some IDA programs elsewhere match withdrawals for home repair and improvement, job training, car purchase, or computer purchase.

Social cost is the value of resources used to produce IDAs at CAPTC.² Schreiner (2000b) measured “start-up” costs in the program from October 1998 through January 1999. This paper extends the analysis through June 2001. Similar exercises will measure “end-down” costs through the end of 2003.

In the 33 months between October 1998 and June 2001, the IDA program at CAPTC produced (Worksheet 22)³:

- 471 enrollments
- 9,336 participant-months
- \$271,090 in net deposits
- 3.5 million dollar-months of savings.

Excluding matches, operational costs were about \$595,366 (\$0.6 million). Thus, cost per unit of output was:

- \$1,264 per enrollment
- \$64 per participant-month
- \$2.20 per dollar of net deposits
- \$0.17 per dollar-month saved.

At CAPTC, the average match rate is about 1.5:1. If all net deposits were taken as matched withdrawals, then each \$2.50 withdrawn (deposits plus match) would cost society \$2.20, or 88 cents per dollar of assets accumulated.

² CAPTC runs three IDA programs. The cost exercise looks only at the “experimental” program whose participants were selected from qualified applicants at random. The full-benefit cost analysis will also focus on the experimental program.

³ See Schreiner *et al.* (2001) and Schreiner (2001) for definitions of *participant-months*, *net deposits*, and *dollar-months saved*.

These costs are about half those of the 15-month start-up period in 1998-99 (Schreiner, 2000b). Costs in the first six months of 2001, however, were about the same as in the 12 months of 2000, so reductions may have reached their end.⁴ Furthermore, costs per unit of output may increase in the “end-down” period as the program handles matched withdrawals.

Of course, these cost estimates do not consider benefits. Furthermore, they rest on a host of imprecise measurements, heroic assumptions, and back-of-the-envelope guesses. They also ignore many aspects of the bundle of outputs that is an IDA, and the margin of error is unknown.⁵

Still, these rough measures of costs and outputs are useful for five reasons. First, they provide a benchmark for better estimates. Second, they are key inputs in the financial benefit-cost analysis. Third, rigorous knowledge of costs provides a healthy balance to anecdotes about the benefits of IDAs. Wise policy choices consider not only benefits but also costs (Schreiner and Yaron, 2001; Devarajan, Squire, and Suthiwart-Narueput, 1997). Fourth, cost estimates set a benchmark. All else constant, the same output for less cost is better. Fifth, the very existence of measures of performance tends to improve performance (Schreiner, 1997).

⁴ Rough cost estimates for all programs in the American Dream Demonstration (Schreiner *et al.*, 2001) are similar to those here (about \$70 per participant-month).

⁵ Schreiner (2000b) and Sherraden (2000) discuss other caveats.

Are costs high or low? Ultimately, costs are high if they exceed benefits and low otherwise. Unfortunately, the benefits of IDAs are still unmeasured. Ng (2001) discusses costs for other asset-accumulation programs.

This brief paper builds on the extensive discussion of the technique and concept of cost analysis for IDAs started in Schreiner (2000b), Sherraden (2000) and Schreiner *et al.* (2001). These details and arguments will not be repeated here. Rather, this paper highlights a few measurement issues not yet discussed, documents cost estimates for IDAs at CAPTC in 2000 and 2001, and then summarizes a few simple measures of costs (and of cost per unit of output) as seen by different stakeholders.

2. Measurement issues

The analysis here ignores some costs. Unlike most analyses, however, this analysis does account for non-cash costs.

2.1 Costs ignored

2.1.1 Matches

Matches for IDAs have no social cost because they are mere transfers from one part of society to another. Resources are neither created nor destroyed.

For narrow groups of stakeholders, matches are costs (or benefits). These costs are not discussed further here, both because very few matches had been made as of the end date for this analysis and because matches (\$131,034) were still small compared with other costs (\$595,366).

2.1.2 Funders' administration

It costs money to give money away, but this analysis ignores costs incurred by funders in the process of funding. The final cost analysis in 2004 will collect this data.

2.1.3 Resources on deposit

IDA participants own their deposits, but, before withdrawal, they do not use the deposited resources. Standard net-present-value frameworks for the analysis of investments (*e.g.*, Gittinger, 1982) account for this via discounting; a dollar in the bank a year from now may be worth only 95 cents today. This analysis has a short time

frame, however, so it ignores the time value of money.⁶ Again, the final analysis in 2004 will use standard discounting.

2.2 Donations from private entities

If IDAs increase net voluntary donations from the private sector, then that increase has no social cost; if the additional (unmeasured) benefits enjoyed by the donor did not exceed her costs, then she would not have donated in the first place. Donations to IDAs do have opportunity costs, however, if they decrease donations made to other causes. After all, if volunteers shift from the United Way to IDAs, then their hours with IDAs are a net extraction from the non-IDA economy.

This cost analysis counts in-kind donations from private entities as costs. This is in accord with standard frameworks for social accounting in development projects (Rosenberg, Christen, and Helms, 1997; Inter-American Development Bank, 1994).

⁶ This analysis also ignores the effects of inflation on monetary values.

3. Cost estimates for 2000 and 2001

This section records estimates of resource use (that is, cost) in 2000 and in the first six months of 2001. The worksheets include the cost estimates for 1998 and 1999 from Schreiner (2000b).

3.1 Receipts of grants in-cash

The experimental IDA program received cash grants from 11 sources, classified into private donors, the federal government, and state and local governments. CAPTC comingled these grants with grants to another IDA program, so the analysis here parcels out the portion of the total grant that pertains to the experimental program.

3.1.1 Private donors

The Corporation for Enterprise Development (CFED) funneled cash to CAPTC from the 11 private sponsors of the American Dream Demonstration. Funds earmarked for matches are labeled *CFED Match*, and other funds are labeled *CFED*. The experimental program received \$67,876 from CFED in 2000 and \$22,970 in the first six months of 2001 (Worksheet 1, line Ac). CFED Match provided \$54,400 in 2000 and \$32,124 in the first six months of 2001 (line Af). Of this, a total of \$73,678 was disbursed as matches (\$44,685 in 2000 and \$28,993 in 2001, Worksheet 2, line Bf).

The Kaiser Foundation, the philanthropic arm of the Bank of Oklahoma (BOk), gave nothing in 2000 and \$2,903 in 2001. About \$1,547 went for matches (Worksheet 2, line Bi).

The Zarrow Foundation gave the experimental program \$6,478, all of which went for matches (Worksheet 1, line Al, and Worksheet 2, line Bl).

As an organization, CAPTC itself provided some cash to the experimental IDA program in 1999, but it provided nothing in 2000 or 2001 (Worksheet 1, line Ao).

3.1.2 Federal government

The federal government provided cash to the experimental IDA program via Community Services Block Grants (CSBG) and through Community Development Block Grants (CDBG). CSBG, the largest source of cash, provided \$178,433 in the 18-month period, \$9,217 of it for matches (Worksheet 1, line Ar, and Worksheet 2, line Br). CDBG provided \$91,048, none of it for matches (lines Au and Bu).

The IDA program also received cash grants from the HOME program of the Department of Housing and Urban Development and from the Affordable Housing Program (AHP) of the Federal Home Loan Bank of Topeka. In both cases, the ultimate source of resources is the federal government. In 2000-2001, HOME provided \$12,300 (all of it for matches), and AHP provided \$15,133 (\$10,380 for matches).⁷

Fannie Mae (\$9,019) and NRC (\$26,415) provided non-match funds. (Like AHP, Fannie Mae is a public entity in spite of its private shareholders. Fannie Mae finances itself with debt implicitly backed by the U.S. government. With almost no default risk, this debt carries almost no risk premium. This lowers the price of funds for Fannie Mae

⁷ Some donations designated for matches have not yet been disbursed.

and produces the much of the profits that fund its donations to CAPTC, donations that a purely private enterprise would not do on such a scale and with such frequency.)

3.1.3 State and local government

The experimental IDA program at CAPTC has yet to receive a cash grant from state or local government.

3.1.4 Total grants in-cash

In 2000, the experimental IDA program at CAPTC received grants in-cash worth \$324,210 (Worksheet 1, line Aan). Of this, 39 percent came from private donors, and 61 percent came from the federal government.

In the first six months of 2001, CAPTC received grants worth \$194,889; 31 percent came from private donors, and 69 percent came from the federal government.

Participants received \$65,757 in matches in 2000 and \$57,635 in the first six months of 2001 (Worksheet 2, line Ban).

3.2 Cash expenses

The accountants at CAPTC assigned cash grants from the donors to specific expenses. This analysis further divides grants between CAPTC's experimental and non-experimental IDA programs for 19 types of cash expenses (Worksheets 3, 4, 5, and 6). (In 1998-1999, the analysis parceled out extraordinary costs for recruitment incurred due to the experimental nature of the program, but, because recruitment ended in 1999, this was unnecessary in 2000 and 2001.) Expenses totaled \$210,728 in 2000 and

\$101,427 in the first six months of 2001 (Worksheet 4, line Cbz). The greatest expense was “salaries and benefits” (56 percent), followed by overhead and general administration (19 percent), and rent (9 percent).

The CAPTC accountants allocate expenses to sources of cash grants (Worksheet 7). In 2000, CSBG and CDBG covered 61 percent of expenses; in 2001, they covered 76 percent. The next-largest source was CFED (27 percent in 2000, 17 percent in 2001).

3.3 Statement of cash flows

Worksheets 8, 9, and 10 link cash on-hand from a given source at the start of the year to cash on-hand at the end of the year. Cash at the end is cash at the start, plus cash receipts, minus cash disbursements for matches and minus cash expenses. For example, cash at the end of 2000 (\$298,613, line Ebm) equals the cash at the start of the year (\$250,888, line Ebj), plus cash receipts (\$324,210, line Ebk), minus cash used for expenses (\$210,728, line Ebm), minus cash used for matches (\$65,757, line Ebl).

Ending balances in Worksheet 8 are exaggerated because they do not net out extraordinary recruitment expenses from 1998-1999. The final cost analysis after 2004 will adjust for this by assuming that cash receipts equal all cash outflows for matches and for ordinary expenses. The analysis tracks cash balances because it will impute an opportunity cost to these idle funds in the final analysis after 2004.

3.4 Receipts of grants in-kind and in-time

Unlike most cost analyses, this paper values grants in-kind and in-time. The accountants at CAPTC do not track these non-cash grants, but non-cash grants can be a large component of total resource inflows. The estimates here are admittedly coarse, but they are much closer to the truth than estimates of zero would be.

3.4.1 Non-cash grants from private donors

3.4.1.1 Members of the Advisory Committee Working Group

The IDA Program Advisory Committee met once in 2000 and not at all in 2001. The implicit cost was \$400 (Worksheet 11, line Fav).

3.4.1.2 VISTA volunteers

In 2000, the IDA program had help from two VISTA volunteers. They were not paid for the full opportunity cost of their time (thus they are “volunteers”, not “workers”). Their service was like a cash grant of \$3,285 in 2000 (Worksheet 12, line Gr, see Schreiner (2000b) for details). CAPTC had no VISTAs in 2001.

3.4.1.3 Employees of CAPTC

Some CAPTC employees provided services to the experimental IDA program—usually by teaching financial-education classes or assisting with home purchases—but the accountants did not expense their time to the IDA program. In 2000, the implied cost was \$473, and in 2002, it was \$465 (Worksheet 13, line Gad).

3.4.1.4 Bank of Oklahoma

As the partner bank for the experimental IDA program, BOk made two types of non-cash grants in 2000-2001. The first was the time BOk employees spent on IDA issues, valued at \$1,925 and \$945 (Worksheet 14, line Hl). The second was the waiver of account-maintenance fees for IDA accounts. A BOk memo states that the service charge on low-balance accounts is typically \$5.00 per month. Given 5,091 participant-months in 2000 and 2,662 participant-months in the first six months of 2001, the implied cost was \$25,260 and \$13,135 (line Hn). This waiver is no small contribution, amounting to about 10 percent of total IDA costs in 2000-2001.

3.4.1.5 Other private donors

Dick Jackson taught financial-education seminars with time valued at \$1,125 (Worksheet 15, line Il). Interns provided service worth \$504 (line Iu), two other volunteer teachers provided service worth \$120 (line Iaj), and the Greenwood Chamber of Commerce provided microenterprise classes worth \$460 (Worksheet 16, line Ian). All told, these other private donor gave the equivalent of \$2,209 (line Iao).

3.4.2 Non-cash grants from the federal government

In 2000-2001, the experimental IDA program received non-cash grants from the federal government through VISTAs compensated by the government. In 2000, this was worth \$17,882 (Worksheet 17, line Jp). There were no VISTAs in 2001.

3.4.3 Non-cash grants from state and local government

In 2000-2001, the experimental IDA program received two non-cash grants from state and local government. First, the Oklahoma State Cooperative Extension Service provided classroom space, printed educational materials, teaching time, and curriculum development worth \$946 (Worksheet 18, line Kg). Second, the Department of Urban Development of the City of Tulsa wrote monitoring reports for the U.S. Department of Housing and Urban Development for grants for participants in the experimental program. The employees of the City of Tulsa who were involved stated that their time on this task was worth \$240 (line Ko).

4. Costs and cost per unit of output

Knowledge of costs—even in the absence of knowledge of benefits—is useful to set a benchmark and to focus attention on the opportunity cost of resources. Still, knowledge of costs is most useful when combined with knowledge of benefits. Once the American Dream Demonstration ends, the overall evaluation will compare costs with benefits. For now, this cost analysis can only compare costs with measures of output.

4.1 Costs

Worksheets 19, 20, and 21 shows total resource use (cost) for 2000 and for the first six months of 2001 (as well as for 1998 and 1999) from the points of view of private donors, the federal government, and state and local governments. (These figures include cash expenses, the value of in-kind donations, and matches.)

The experimental IDA program at CAPTC used up \$353,574 in 2000 and \$176,660 in the first six months of 2001 (Worksheet ?, line Lau). The total for all 33 months—October 1998 through June 2001—is \$726,400, or about \$0.7 million.⁸ Of this, \$131,034—18 percent—went for matches. Thus, the ratio of non-match costs to match costs was about 4:1.

About 19 percent of all resources used came from non-cash grants. A cost analysis that ignored non-cash grants would severely underestimate costs.

⁸ This figure includes both program expenses and match disbursements.

About 37 percent of resources used (\$268,480) came from private sources. About 62 percent of costs (\$448,234) came from the federal government, and the rest (about 1 percent or \$9,686) came from the state and local government.

4.2 Outputs

Worksheet 22 shows four measures of output: enrollments, participant-months, dollars deposited net of unapproved withdrawals, and dollar-months of resources saved.

An *enrollment* occurs when an applicant completes all the requirements to participate and opens an IDA account at the Bank of Oklahoma. The experimental program at CAPTC enrolled 208 participants in 2000 and 2 in 2001 (line Ma).

A *participant-month* is a month in which a person is enrolled in the IDA program. For example, if someone enrolls in January and leaves the program in June, the output produced is 6 participant-months. The experimental IDA program produced 5,091 participant-months in 2000 and 2,662 in the first six months of 2001 (line Mb).

A *dollar of net deposits* is a dollar put into an IDA bank account that has not been withdrawn for an unapproved use. Thus, a dollar counts as a net deposit if it is still in the account or if it has already been withdrawn for an approved use. For example, if a participant deposited \$10 in January, made an unapproved withdrawal of \$5 in February, and then made an approved withdrawal of \$5 in August, the net deposit would be $\$10 - \$5 = \$5$. In 2000, the experimental program produced \$197,971 in net deposits (line Mg). In the first six months of 2001, net deposits were \$73,119.

Finally, a *dollar-month saved* is a dollar left on deposit for a month (Schreiner, 2001). For example, if a person deposited \$10 on January 1, deposited \$20 on February 1, and withdrew all \$30 on March 1, then the number of dollar-months saved would be $\$10 + (\$10 + \$20) = \40 . Dollar-months saved is equivalent to the end-of-month balances summed across all months. Unlike output measured as net deposits, output measured as dollar-months saved accounts for the length of time that resources are left on deposit. The experimental program produced 1,722,892 dollar-months of resources saved in 2000 and 1,462,244 in 2001 (line Md).

4.3 Cost per unit of output

Worksheet 22 compares measurements of costs and outputs to show *cost-effectiveness*, that is, cost per unit of output. Because the concern here is with social cost and because matches are merely transfers from one part of society to another, the cost measure is net of disbursements for matches. The key ratio is cumulative cost to cumulative output (not annual cost to annual output) because, in the long term, cumulative costs are what matters, not the highest-cost year, not the lowest-cost year, and certainly not whether costs go up or down through the project cycle.

So far, each enrollment in the experimental IDA program at CAPTC cost society \$1,246 (Worksheet 22, line Mq). Of course, because enrollment has ended and because costs are incurred each year, cost per enrollment will increase each year.

The production of a participant-month cost \$64 (line Mr). This figure has fallen each year, although the decrease has flattened, standing at \$69 for the year of 2000 and at \$66 for the first six months of 2001 (line Mn). In fact, in 2000, operational cost per month was \$29,464, almost equal to the \$29,443 figure for 2001. Only a small share of participants has made matched withdrawals so far, so costs may increase again as project “end-down” kicks in with the management of many matched withdrawals.

Given that the average participant added \$29 to net deposits in each month, the social cost of each dollar of net deposits was \$2.20 (line Ms). Given the average match rate at CAPTC is 1.5:1 and supposing that all net deposits were taken as matched withdrawals on June 30, 2001, without incurring any additional costs, then the social cost of each dollar of assets accumulated through IDAs would be about \$1.50.⁹

Finally, each dollar-month of resources moved through time cost society \$0.17 (line Mt). Cost per dollar-month saved will almost certainly continue to fall.

4.4 Discussion

What do these cost estimates mean for IDA policy? Unfortunately, it is much easier to compute costs than to make policy decisions. Fortunately, policy decisions are much easier to make with knowledge of costs than without.¹⁰

⁹ This is the \$2.20 in operational cost per dollar of net deposit plus the \$1.50 of match, divided by the \$1.00 of net deposit plus the \$1.50 of match, or $1.48 = (\$2.20 + \$1.50) / (\$1.50 + \$1.00)$.

¹⁰ This section draws on Schreiner *et al.* (2001).

4.4.1 IDAs are a bundle of outputs

Saying that IDAs cost \$1,264 per enrollment is like saying that a \$10,000 car costs \$2,500 per tire. The \$1,264 used up for each enrollment also buys, for the average participant, about 20 participant-months, about \$575 in net deposits, and about 7,364 dollar-months of resources saved. IDAs produce a bundle of outputs, so to compare cost to only one output inevitably overstates the true cost of that single output.¹¹

4.4.1 IDAs are a bundle of inputs

Costs in IDAs arise from a variety of sources. Inputs into IDAs go beyond the match, program administration, and tracking deposits and withdrawals. IDA inputs include case management and one-on-one counseling (both at enrollment and throughout participation), financial education (both general and targeted to the purchase and ownership of specific assets), informal support from program staff, facilitation for informal support among participants, and access to low-cost passbook accounts.

4.4.2 IDAs versus traditional cash assistance

Rather than spend \$64 on program expenses to produce \$29 in net deposits, why not send participants a monthly check for \$64 and dispense with IDAs and the need to

¹¹ Still, knowledge of such average costs is useful. For example, if benefits per participant-month were known—and measuring this is a central goal of the experimental design—then a benefit-cost analysis could indeed base policy choices on a comparison of cost per participant-month to benefit per participant-month.

sacrifice to save? For several reasons, the comparison between assistance in asset accumulation through IDAs and traditional cash assistance is not this straightforward.

First, IDAs require some saving effort from participants. Thus, IDAs are self-targeted to those people able and willing to sacrifice today for a better tomorrow. Cash transfers are not as precisely targeted, and cash transfers themselves also have non-trivial administration costs.

Second, IDAs delay cash disbursement for matches, and this may prompt participants to think about how best to use their expected matches. IDA participants may think about their resources in ways that cash-transfer recipients do not, and this may lead to non-economic changes in patterns of thought and behavior.

Third, IDAs attempt to restrict the use of transfers to the purchase of assets that generally improve both individual and social well-being in the long term. In fact, it might be said that IDAs attempt to transfer not cash but rather homes, human capital, and microenterprises.

Fourth, IDAs are coupled with financial education that attempts to transfer knowledge and world views conducive to long-term wealth and well-being.

Fifth and finally, social support and encouragement from IDA staff and from peers may help people to save (Moore *et al.*, 2001).

In short, IDAs are not just savings accounts; they are a bundle of services and institutional structures designed to make it easier for the poor to save and accumulate assets. Thus, they are difficult to compare directly to cash transfers.

4.4.3 Benchmarks for comparison

Are the costs reported here high or low? In short, are IDAs worth it?

The cost measures at CAPTC constitute a sample of size one. Difficult-to-value, non-financial costs are ignored, and other costs may be overstated; the margin of error is unknown. What matters for policy is not so much the costs at CAPTC but rather the costs of a universal, permanent policy. That eventual design may or may not differ from that of IDAs as implemented at CAPTC. Whatever the design, the best guess as to future costs would start from the estimate for CAPTC from this paper and then use explicit judgement and reasoning to project to the eventual cost structure.

Unfortunately, there is not yet any good benchmark against which to judge whether improved social welfare through asset accumulation in IDAs is expensive or inexpensive, a bargain or a rip-off. Ultimately, social worth depends on benefits exceeding costs, but there is not yet any measure of benefits. Certainly, the concept of long-term improvement in the well-being of the poor through assisted asset accumulation—be they financial assets, human capital, physical assets, or social capital—is the only way to speed up the defeat of poverty. The only question is whether IDAs—or some variant on their current design—will be part of the battle.

Ng (2001) is an excellent discussion of the cost of IDAs and the costs of other capital-development programs. One set of comparisons looks at IDAs and at pure financial-capital accumulation programs, including defined-benefit plans, defined-contribution plans, and 401(k) plans. Ng notes that these financial-capital accumulation programs are much less costly than IDAs, but also that they are one-dimensional, unlike IDAs, which provide not only access to subsidized savings but also to a range of other savings-support services. In this sense, IDAs resemble multi-faceted social interventions than they resemble traditional subsidized-savings programs.

Because of this, Ng also compares IDAs to human-capital development programs such as Head Start, Women, Infants, and Children (WIC), and welfare-to-work programs. Ng finds that the costs of IDAs are “within the range of human-capital programs” (p. 8). Ng, however, is careful to point out that all these cost analyses inevitably must compare apples with oranges, for a long list of reasons:

- Benefits are not measured, and what matters is not benefits alone nor costs alone, but rather benefits net of costs
- Although all the programs compared aim to build assets, variation in the type and levels of program inputs and outputs is so wide as to make explicit comparison virtually impossible
- Reports of program outputs are often in units that do not account for the length of participation or that otherwise impede cross-program comparisons

- Programs differ in comprehensiveness (number of services) and intensity
- The IDA cost studies may be the only ones to account for the costs of non-cash donated resources. In general, different cost studies include or exclude different categories of resources consumed, inhibiting attempts at comparison.
- IDA programs are fairly new and thus cannot yet take advantage of economies of learning nor build on existing recognition of the program for recruitment
- IDA programs are still small and thus cannot yet take advantage of economies of scale
- Cost variation between specific implementations of a given program can be just as wide as variation between different types of programs

Ng (2001, p. 9) concludes:

Comparing program costs is informative but fraught with difficulties. A recurring theme is that even if programs produce the same output—and none of the programs discussed here does—they vary in their implementation, and consequently costs vary across sites. Comparison of program costs would be more useful if there were a range of costs available for each program. This is true in particular for IDAs where the range of program costs reflect variation in a host of factors, including number of accounts, participant behavior, staff time, range of services offered, frequency of services, and whether the program is part of a host organization.

4.4.4 Costs and the future of IDAs

To reduce costs, IDAs may have to shed some services from its bundle. Of course, an explicit concern for costs is not necessarily equivalent to an insistence to cut services. After all, “efficiency” is defined as the minimum cost *for a given level of*

service. Cuts in services can curtail costs, but they need not increase efficiency, and they may even decrease it. What matters for good policy decisions is that costs are explicit, and what matters for good program implementation is that there are benchmarks against which to track progress.

IDAs are a complex package of services, constraints, and opportunities; the benefits of participation are not yet measured and so cannot be compared with the costs discussed here. Furthermore, the cost estimates are rough. Even if the estimates had marked upward biases, however, IDAs would still be costly. For example, even if costs fell to \$1 per dollar of net deposits (a decrease of more than 50 percent), funders—in particular, the federal government, the only funder with deep enough pockets to support a permanent, universal IDA policy—might have difficulty supporting IDAs with the current bundle of services and decentralized structure, even if social benefits do turn out to exceed costs.

Qualitative evidence from the evaluation of the American Dream Demonstration suggests that participants highly value close contact with staff. A key challenge for IDA programs is thus to find a way to provide such labor-intensive (and costly) services efficiently. In the end, the tension between intensive services and the types of cost structures that would allow broad access to IDAs may lead to two tiers of IDA designs, the first with broad access, simple services, and lower costs, and the second with targeted access, intensive services, and higher costs (Sherraden, 2000).

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Worksheet 1: Receipts of grants in-cash by source

Line	Donor	Quantity	Formula	1998	1999	2000	2001
Private							
Aa	CFED	Cash receipts total	Data	0	125,000	90,713	30,400
Ab		Share to experiment	Data	0.800	0.800	0.748	0.756
Ac		Cash receipts experiment	Aa*Ab	0	100,000	67,876	22,970
Ad	CFED match	Cash receipts total	Data	0	26,848	72,123	42,133
Ae		Share to experiment	Data	0.833	0.833	0.754	0.762
Af		Cash receipts experiment	Ad*Ae	0	22,373	54,400	32,124
Ag	BOK/Kaiser	Cash receipts total	Data	25,000	3,550	1,130	3,785
Ah		Share to experiment	Data	0.847	0.847	0.000	0.767
Ai		Cash receipts experiment	Ag*Ah	21,171	3,006	0	2,903
Aj	Zarrow	Cash receipts total	Data	0	35,000	3,633	2,845
Ak		Share to experiment	Data	0.847	0.847	1.000	1.000
Al		Cash receipts experiment	Aj*Ak	0	29,640	3,633	2,845
Am	CAPTC	Cash receipts total	Data	0	764	0	0
An		Share to experiment	Data	0.000	0.000	0.000	0.000
Ao		Cash receipts experiment	Am*An	0	0	0	0
Federal							
Ap	CSBG	Cash receipts total	Data	49,856	99,713	134,454	100,841
Aq		Share to experiment	Data	0.701	0.803	0.755	0.763
Ar		Cash receipts experiment	Ap*Aq	34,924	80,031	101,481	76,952
As	CDBG	Cash receipts total	Data	33,859	67,719	86,286	37,136
At		Share to experiment	Data	0.701	0.701	0.740	0.732
Au		Cash receipts experiment	As*At	23,719	47,437	63,847	27,201
Av	HOME	Cash receipts total	Data	0	9,282	6,558	5,742
Aw		Share to experiment	Data	0.000	1.000	1.000	1.000
Ax		Cash receipts experiment	Av*Aw	0	9,282	6,558	5,742
Ay	AHP	Cash receipts total	Data	0	0	50,151	19,731
Az		Share to experiment	Data	1.000	1.000	0.000	0.767
Aaa		Cash receipts experiment	Ay*Az	0	0	0	15,133
Aab	NRC	Cash receipts total	Data	0	0	0	11,758
Aac		Share to experiment	Data	0.000	0.000	0.000	0.767
Aad		Cash receipts experiment	Aab*Aac	0	0	0	9,019
Aae	Fannie Mae	Cash receipts total	Data	0	0	35,000	0
Aaf		Share to experiment	Data	0.000	0.000	0.755	0.000
Aag		Cash receipts experiment	Aae*Aaf	0	0	26,415	0
State or local							
Aah	(none)	Cash receipts total	Data	0	0	0	0
Aai		Share to experiment	Data	0.000	0.000	0.000	0.000
Aaj		Cash receipts experiment	Aah*Aai	0	0	0	0
Cash receipts experiment total							
Aak		Private	Ac+Af+Ai+Al+Ao	21,171	155,019	125,908	60,842
Aal		Federal	Ar+Au+Ax+Aaa+Aad+Aag+Aaj	58,643	136,750	198,302	134,047
Aam		State or local	Aaj	0	0	0	0
Aan		Total	Aak+Aal+Aam	79,814	291,769	324,210	194,889

Source: Data from CAPTC and calculations of the author.

Worksheet 2: Disbursements of cash for matches by source

Line	Donor	Quantity	Formula	1998	1999	2000	2001
Private							
Ba	CFED	Match disbursements total	Data	0	0	0	0
Bb		Share to experiment	Data	0.000	0.000	0.000	0.000
Bc		Match disbursements experiment	Ba*Bb	0	0	0	0
Bd	CFED match	Match disbursements total	Data	0	8,850	44,685	28,993
Be		Share to experiment	Data	0.000	0.351	1.000	1.000
Bf		Match disbursements experiment	Bd*Be	0	3,104	44,685	28,993
Bg	BOK/Kaiser	Match disbursements total	Data	1,217	7,805	0	1,547
Bh		Share to experiment	Data	0.000	0.096	0.000	1.000
Bi		Match disbursements experiment	Bg*Bh	0	750	0	1,547
Bj	Zarrow	Match disbursements total	Data	1,415	9,287	3,633	2,845
Bk		Share to experiment	Data	0.000	0.000	1.000	1.000
Bl		Match disbursements experiment	Bj*Bk	0	0	3,633	2,845
Bm	CAPTC	Match disbursements total	Data	0	0	0	0
Bn		Share to experiment	Data	0.000	0.000	0.000	0.000
Bo		Match disbursements experiment	Bm*Bn	0	0	0	0
Federal							
Bp	CSBG	Match disbursements total	Data	0	10,182	10,880	8,129
Bq		Share to experiment	Data	0.000	0.372	1.000	1.000
Br		Match disbursements experiment	Bp*Bq	0	3,788	10,880	8,129
Bs	CDBG	Match disbursements total	Data	0	0	0	0
Bt		Share to experiment	Data	0.000	0.000	0.000	0.000
Bu		Match disbursements experiment	Bs*Bt	0	0	0	0
Bv	HOME	Match disbursements total	Data	0	0	6,558	5,742
Bw		Share to experiment	Data	0.000	0.000	1.000	1.000
Bx		Match disbursements experiment	Bv*Bw	0	0	6,558	5,742
By	AHP	Match disbursements total	Data	0	0	0	10,380
Bz		Share to experiment	Data	0.000	0.000	0.000	1.000
Baa		Match disbursements experiment	By*Bz	0	0	0	10,380
Bab	NRC	Match disbursements total	Data	0	0	0	0
Bac		Share to experiment	Data	0.000	0.000	0.000	0.000
Bad		Match disbursements experiment	Bab*Bac	0	0	0	0
Bae	Fannie Mae	Match disbursements total	Data	4,755	28,499	0	0
Baf		Share to experiment	Data	0.000	0.000	0.000	0.000
Bag		Match disbursements experiment	Bae*Baf	0	0	0	0
State or local							
Bah	(none)	Match disbursements total	Data	0	0	0	0
Bai		Share to experiment	Data	0.000	0.000	0.000	0.000
Baj		Match disbursements experiment	Bah*Bai	0	0	0	0
Match disbursements experiment total							
Bak	Private		Bc+Bf+Bi+Bl+Bo	0	3,854	48,318	33,384
Bal	Federal		Br+Bu+Bx+Baa+Bad+Bag+Baj	0	3,788	17,438	24,251
Bam	State or local		Baj	0	0	0	0
Ban	Total		Bak+Bal+Bam	0	7,642	65,757	57,635

Source: Data from CAPTC and calculations of the author.

Worksheet 3: Allocation of ordinary expenses to the experimental program, Part I

Line	Quantity	Formula	1998	1999	2000	2001
Ca	Extraordinary recruitment factor	Data	4.0	4.0	1.0	1.0
Cb	Overhead and gen. admin.	Data	4,755	28,499	59,715	19,797
Cc	Share to experiment	Data	0.7005	0.7005	0.7614	0.7670
Cd	Share to recruitment	Data	0.7570	0.7570	0.0000	0.0000
Ce	Overhead and gen. admin. to experiment	$Cb*[Cc*(1-Cd+Cd/Ca)]$	1,440	8,629	45,466	15,184
Cf	Salaries and benefits	Data	49,674	163,316	191,806	122,213
Cg	Share to experiment	Data	0.7005	0.7005	0.5830	0.5170
Ch	Share to recruitment	Data	0.7570	0.7570	0.0000	0.0000
Ci	Salaries and benefits to experiment	$Cf*[Cg*(1-Ch+Ch/Ca)]$	15,041	49,451	111,815	63,189
Cj	Telephone	Data	1,178	13,927	4,692	2,556
Ck	Share to experiment	Data	0.4000	0.4000	0.6955	0.6499
Cl	Share to recruitment	Data	0.7570	0.7570	0.0000	0.0000
Cm	Telephone to experiment	$Cj*[Ck*(1-Cl+Cl/Ca)]$	204	2,408	3,263	1,661
Cn	Rent	Data	5,025	23,611	25,132	13,939
Co	Share to experiment	Data	0.7005	0.7005	0.7531	0.7670
Cp	Share to recruitment	Data	0.7570	0.7570	0.0000	0.0000
Cq	Rent to experiment	$Cn*[Co*(1-Cp+Cp/Ca)]$	1,521	7,149	18,928	10,691
Cr	Postage and shipping	Data	1,966	9,358	4,181	1,799
Cs	Share to experiment	Data	0.6500	0.6500	0.7306	0.7670
Ct	Share to recruitment	Data	0.7570	0.7570	0.0000	0.0000
Cu	Postage and shipping to experiment	$Cr*[Cs*(1-Ct+Ct/Ca)]$	552	2,629	3,055	1,380

Source: Data from CAPTC and calculations of the author.

Worksheet 4: Allocation of ordinary expenses to the experimental program, Part II

Line	Quantity	Formula	1998	1999	2000	2001
Cv	Supplies	Data	727	17,379	3,904	1,070
Cw	Share to experiment	Data	0.7005	0.7005	0.7180	0.7674
Cx	Share to recruitment	Data	0.7570	0.7570	0.0000	0.0000
Cy	Supplies to experiment	$Cv*[Cw*(1-Cx+Cx/Ca)]$	220	5,262	2,803	821
Cz	Printing	Data	0	625	12,158	4,756
Caa	Share to experiment	Data	1.0000	1.0000	0.7521	0.7670
Cab	Share to recruitment	Data	1.0000	1.0000	0.0000	0.0000
Cac	Printing to experiment	$Cz*[Caa*(1-Cab+Cab/Ca)]$	0	156	9,143	3,648
Cad	Computer and other equip.	Data	9,186	6,806	6,797	0
Cae	Share to experiment	Data	0.7005	0.7005	0.7535	0.0000
Caf	Share to recruitment	Data	0.7570	0.7570	0.0000	0.0000
Cag	Computer and other equip. to experiment	$Cad*[Cae*(1-Caf+Caf/Ca)]$	2,781	2,061	5,121	0
Cah	Advertising/promotions	Data	100	20,803	0	0
Cai	Share to experiment	Data	1.0000	1.0000	0.0000	0.6600
Caj	Share to recruitment	Data	1.0000	1.0000	0.0000	0.0000
Cak	Advertising/promotions to experiment	$Cah*[Cai*(1-Caj+Caj/Ca)]$	25	5,201	0	0
Cal	Professional consulting	Data	451	1,061	197	86
Cam	Share to experiment	Data	1.0000	1.0000	0.7524	0.7670
Can	Share to recruitment	Data	1.0000	1.0000	0.0000	0.0000
Cao	Professional consulting to experiment	$Cal*[Cam*(1-Can+Can/Ca)]$	113	265	148	66

Source: Data from CAPTC and calculations of the author

Worksheet 5: Allocation of ordinary expenses to the experimental program, Part III

Line	Quantity	Formula	1998	1999	2000	2001
Cap	Audit	Data	523	840	1,556	0
Caq	Share to experiment	Data	0.7005	0.7005	0.7664	0.0000
Car	Share to recruitment	Data	0.7570	0.7570	0.0000	0.0000
Cas	Audit to experiment	$Cap*[Caq*(1-Car+Car/Ca)]$	158	254	1,192	0
Cat	Repairs and maintenance	Data	0	208	1,038	45
Cau	Share to experiment	Data	0.7005	0.7005	0.7530	0.7670
Cav	Share to recruitment	Data	0.7570	0.7570	0.0000	0.0000
Caw	Repairs and maintenance to experiment	$Cat*[Cau*(1-Cav+Cav/Ca)]$	0	63	782	34
Cax	Insurance	Data	83	2,171	2,822	1,942
Cay	Share to experiment	Data	0.7005	0.7005	0.7427	0.7670
Caz	Share to recruitment	Data	0.7570	0.7570	0.0000	0.0000
Cba	Insurance to experiment	$Cax*[Cay*(1-Caz+Caz/Ca)]$	25	657	2,096	1,490
Cbb	Mileage	Data	195	77	481	510
Cbc	Share to experiment	Data	1.0000	1.0000	0.1815	0.5364
Cbd	Share to recruitment	Data	1.0000	1.0000	0.0000	0.0000
Cbe	Mileage to experiment	$Cbb*[Cbc*(1-Cbd+Cbd/Ca)]$	49	19	87	273
Cbf	Business meals	Data	302	1,053	1,532	1,095
Cbg	Share to experiment	Data	0.7005	0.7005	0.4022	0.4956
Cbh	Share to recruitment	Data	0.0000	0.0000	0.0000	0.0000
Cbi	Business meals to experiment	$Cbf*[Cbg*(1-Cbh+Cbh/Ca)]$	212	738	616	543

Source: Data from CAPTC and calculations of the author

Worksheet 6: Allocation of ordinary expenses to the experimental program, Part IV

Line	Quantity	Formula	1998	1999	2000	2001
Cbj	Lodging and travel	Data	0	6,567	6,404	2,512
Cbk	Share to experiment	Data	0.3500	0.3500	0.5965	0.5847
Cbl	Share to recruitment	Data	0.0000	0.0000	0.0000	0.0000
Cbm	Lodging and travel to experiment	$Cbj * [Cbk * (1 - Cbl + Cbl / Ca)]$	0	2,298	3,820	1,469
Cbn	Staff development	Data	220	2,789	5,384	2,205
Cbo	Share to experiment	Data	0.3500	0.3500	0.4444	0.3877
Cbp	Share to recruitment	Data	0.0000	0.0000	0.0000	0.0000
Cbq	Staff development to experiment	$Cbn * [Cbo * (1 - Cbp + Cbp / Ca)]$	77	976	2,393	855
Cbr	Participant referral incentive	Data	0	360	0	0
Cbs	Share to experiment	Data	1.0000	1.0000	0.0000	0.0000
Cbt	Share to recruitment	Data	1.0000	1.0000	0.0000	0.0000
Cbu	Participant referral incentive to experiment	$Cbr * [Cbs * (1 - Cbt + Cbt / Ca)]$	0	90	0	0
Cbv	Miscellaneous	Data	414	7,276	4,517	412
Cbw	Share to experiment	Data	0.7005	0.7005	0.0000	0.2993
Cbx	Share to recruitment	Data	0.7570	0.7570	0.0000	0.0000
Cby	Miscellaneous to experiment	$Cbv * [Cbw * (1 - Cbx + Cbx / Ca)]$	125	2,203	0	123
Cbz	Total ordinary expenses		22,543	90,510	210,728	101,427
$Ce + Ci + Cm + Cq + Cu + Cy + Cac + Cag + Cak + Cao + Cas + Caw + Cba + Cbe + Cbi + Cbm + Cbq + Cbu + Cbv + Cbw + Cbx + Cby + Cbz$						

Source: Data from CAPTC and calculations of the author

Worksheet 7: Allocation of ordinary expenses to sources of cash

Line	Donor	Quantity	Formula	1998	1999	2000	2001
Da		Total ordinary expenses	Cbz	22,543	90,510	210,728	101,427
Private							
Db	CFED	Share of ord. exp.	Data	0.0000	0.1564	0.2738	0.1736
Dc		Charge for ordinary exp.	Db*Da	0	14,156	57,706	17,612
Dd	CFED match	Share of ord. exp.	Data	0.0000	0.0000	0.0000	0.0019
De		Charge for ordinary exp.	Dd*Da	0	0	0	196
Df	BOk/Kaiser	Share of ord. exp.	Data	0.0000	0.0000	(0.0020)	0.0000
Dg		Charge for ordinary exp.	Df*Da	0	0	(416)	0
Dh	Zarrow	Share of ord. exp.	Data	0.0000	0.0000	(0.0038)	0.0004
Di		Charge for ordinary exp.	Dh*Da	0	0	(797)	41
Dj	CAPTC	Share of ord. exp.	Data	0.0000	0.0000	0.0000	0.0000
Dk		Charge for ordinary exp.	Dj*Da	0	0	0	0
Federal							
Di	CSBG	Share of ord. exp.	Data	0.5460	0.3510	0.3494	0.5447
Dm		Charge for ordinary exp.	Di*Da	12,309	31,769	73,618	55,248
Dn	CDBG	Share of ord. exp.	Data	0.4540	0.4926	0.2605	0.2121
Do		Charge for ordinary exp.	Dn*Da	10,235	44,585	54,890	21,515
Dp	HOME	Share of ord. exp.	Data	0.0000	0.0000	0.0000	0.0000
Dq		Charge for ordinary exp.	Dp*Da	0	0	0	0
Dr	AHP	Share of ord. exp.	Data	0.0000	0.0000	0.0164	0.0000
Ds		Charge for ordinary exp.	Dr*Da	0	0	3,463	0
Dt	NRC	Share of ord. exp.	Data	0.0000	0.0000	0.0000	0.0672
Du		Charge for ordinary exp.	Dt*Da	0	0	0	6,812
Dv	Fannie Mae	Share of ord. exp.	Data	0.0000	0.0000	0.1057	0.0000
Dw		Charge for ordinary exp.	Dv*Da	0	0	22,265	0
State or local							
Dx	(none)	Share of ord. exp.	Data	0.0000	0.0000	0.0000	0.0000
Dy		Charge for ordinary exp.	Dx*Da	0	0	0	0
Total ordinary expenses							
Dz	Private	Dc+De+Dg+Di+Dk		0	14,156	56,493	17,850
Daa	Federal	Dm+Do+Dq+Ds+Du+Dw+Dy		22,543	76,354	154,235	83,575
Dab	State or local	Dy		0	0	0	0
Dac	Total	Dz+Daa+Dab		22,543	90,510	210,728	101,425

Source: Data from CAPTC and calculations of the author.

Worksheet 8: Statement of cash flows by source, Part I

Line	Donor	Quantity	Formula	1998	1999	2000	2001
Private							
Ea	CFED	Cash balance start	Ee(t-1)	0	0	85,844	96,014
Eb		Cash receipts	Ac	0	100,000	67,876	22,970
Ec		Match disbursements	Bc	0	0	0	0
Ed		Ordinary expenses	Dc	0	14,156	57,706	17,612
Ee		Cash balance end	Ea+Eb-Ec-Ed	0	85,844	96,014	101,372
Ef	CFED match	Cash balance start	Ej(t-1)	0	0	19,270	28,984
Eg		Cash receipts	Af	0	22,373	54,400	32,124
Eh		Match disbursements	Bf	0	3,104	44,685	28,993
Ei		Ordinary expenses	De	0	0	0	196
Ej		Cash balance end	Ef+Eg-Eh-Ei	0	19,270	28,984	31,919
Ek	BOk/Kaiser	Cash balance start	Eo(t-1)	0	21,171	23,427	23,844
El		Cash receipts	Ai	21,171	3,006	0	2,903
Em		Match disbursements	Bi	0	750	0	1,547
En		Ordinary expenses	Dg	0	0	(416)	0
Eo		Cash balance end	Ek+El-Em-En	21,171	23,427	23,844	25,200
Ep	Zarrow	Cash balance start	Et(t-1)	0	0	29,640	30,436
Eq		Cash receipts	Al	0	29,640	3,633	2,845
Er		Match disbursements	Bl	0	0	3,633	2,845
Es		Ordinary expenses	Di	0	0	(797)	41
Et		Cash balance end	Ep+Eq-Er-Es	0	29,640	30,436	30,395
Eu	CAPTC	Cash balance start	Ey(t-1)	0	0	0	0
Ev		Cash receipts	Ao	0	0	0	0
Ew		Match disbursements	Bo	0	0	0	0
Ex		Ordinary expenses	Dk	0	0	0	0
Ey		Cash balance end	Eu+Ev-Ew-Ex	0	0	0	0

Source: Data from CAPTC and calculations of the author.

Worksheet 9: Statement of cash flows by source, Part II

Line	Donor	Quantity	Formula	1998	1999	2000	2001
Federal							
Ez	CSBG	Cash balance start	Ead(t-1)	0	22,616	67,089	84,072
Eaa		Cash receipts	Ar	34,924	80,031	101,481	76,952
Eab		Match disbursements	Br	0	3,788	10,880	8,129
Eac		Ordinary expenses	Dm	12,309	31,769	73,618	55,248
Ead		Cash balance end	Ez+Eaa-Eab-Eac	22,616	67,089	84,072	97,648
CDBG							
Eae	CDBG	Cash balance start	Eai(t-1)	0	13,484	16,336	25,293
Eaf		Cash receipts	Au	23,719	47,437	63,847	27,201
Eag		Match disbursements	Bu	0	0	0	0
Eah		Ordinary expenses	Do	10,235	44,585	54,890	21,515
Eai		Cash balance end	Eae+Eaf-Eag-Eah	13,484	16,336	25,293	30,979
HOME							
Eaj	HOME	Cash balance start	Ean(t-1)	0	0	9,282	9,282
Eak		Cash receipts	Ax	0	9,282	6,558	5,742
Eal		Match disbursements	Bx	0	0	6,558	5,742
Eam		Ordinary expenses	Dq	0	0	0	0
Ean		Cash balance end	Eaj+Eak-Eal-Eam	0	9,282	9,282	9,282
AHP							
Eao	AHP	Cash balance start	Eas(t-1)	0	0	0	(3,463)
Eap		Cash receipts	Aaa	0	0	0	15,133
Eaq		Match disbursements	Baa	0	0	0	10,380
Ear		Ordinary expenses	Ds	0	0	3,463	0
Eas		Cash balance end	Eao+Eap-Eaq-Ear	0	0	(3,463)	1,290
NRC							
Eat	NRC	Cash balance start	Eax(t-1)	0	0	0	0
Eau		Cash receipts	Aad	0	0	0	9,019
Eav		Match disbursements	Bad	0	0	0	0
Eaw		Ordinary expenses	Du	0	0	0	6,812
Eax		Cash balance end	Eat+Eau-Eav-Eaw	0	0	0	2,206
Fannie Mae							
Eay	Fannie Mae	Cash balance start	Ebd(t-1)	0	0	0	4,151
Eba		Cash receipts	Aag	0	0	26,415	0
Ebb		Match disbursements	Bag	0	0	0	0
Ebc		Ordinary expenses	Dw	0	0	22,265	0
Ebd		Cash balance end	Eay+Eba-Ebb-Ebc	0	0	4,151	4,151

Source: Data from CAPTC and calculations of the author.

Worksheet 10: Statement of cash flows by source, Part III

Line	Donor	Quantity	Formula	1998	1999	2000	2001
State or local							
Ebe	(none)	Cash balance start	Ebi(t-1)	0	0	0	0
Ebf		Cash receipts	Aaj	0	0	0	0
Ebg		Match disbursements	Baj	0	0	0	0
Ebh		Ordinary expenses	Dy	0	0	0	0
Ebi		Cash balance end	Ebe+Ebf-Ebg-Ebh	0	0	0	0
Ebj	Total	Cash balance start	Ebn(t-1)	0	57,271	250,888	298,613
Ebk		Cash receipts		79,814	291,769	324,210	194,889
		Eb+Eg+El+Eq+Ev+Eaa+Eaf+Eak+Eap+Eau+Eba+Ebf					
Ebl		Match disbursements		0	7,642	65,757	57,635
		Ec+Eh+Em+Er+Ew+Eab+Eag+Eal+Eaq+Eav+Ebb+Ebg					
Ebm		Ordinary expenses		22,543	90,510	210,728	101,425
		Ed+Ei+En+Es+Ex+Eac+Eah+Eam+Ear+Eaw+Ebc+Ebh					
Ebn		Cash balance end	Ebj+Ebk-Ebl-Ebm	57,271	250,888	298,613	334,442

Source: Data from CAPTC and calculations of the author.

Worksheet 11: In-time grants by members of the Working Group of the Advisory Committee

Line	Member	Quantity	Formula	1998	1999	2000	2001
Fa	Brown, Sondra	Hours in meetings	Data	4	8	2	0
Fb		Cost per hour	Data				
Fc		Cost donated time	Fa*Fb				
Fd	Bunnell, Jill	Hours in meetings	Data	4	8	2	0
Fe		Cost per hour	Data				
Ff		Cost donated time	Fd*Fe				
Fg	Calvin, Donna	Hours in meetings	Data	0	2.5	0	0
Fh		Cost per hour	Data				
Fi		Cost donated time	Fg*Fh				
Fj	Crawford, Leisa	Hours in meetings	Data	0	2	0	0
Fk		Cost per hour	Data				
Fl		Cost donated time	Fj*Fk				
Fm	Dougherty, Paul	Hours in meetings	Data	4	8	0	0
Fn		Cost per hour	Data				
Fo		Cost donated time	Fm*Fn				
Fp	Exline, Meredith	Hours in meetings	Data	4	6	2	0
Fq		Cost per hour	Data				
Fr		Cost donated time	Fp*Fq				
Fs	Jackson, Dick	Hours in meetings	Data	4	8	2	0
Ft		Cost per hour	Data				
Fu		Cost donated time	Fs*Ft				
Fv	Larson, Lynn	Hours in meetings	Data	4	8	0	0
Fw		Cost per hour	Data				
Fx		Cost donated time	Fv*Fw				
Fy	Peters, Vicki	Hours in meetings	Data	4	8	2	0
Fz		Cost per hour	Data				
Faa		Cost donated time	Fy*Fz				
Fab	Richard, Maxine	Hours in meetings	Data	0	2.5	0	0
Fac		Cost per hour	Data				
Fad		Cost donated time	Fab*Fac				
Fae	Steib, Steve	Hours in meetings	Data	4	8	2	0
Faf		Cost per hour	Data				
Fag		Cost donated time	Fae*Faf				
Fah	Trincinella, Barbara	Hours in meetings	Data	4	8	2	0
Fai		Cost per hour	Data				
Faj		Cost donated time	Fah*Fai				
Fak	Wilson, Tywanna	Hours in meetings	Data	0	0	0	0
Fal		Cost per hour	Data				
Fam		Cost donated time	Fak*Fal				
Fan	Young, Carol	Hours in meetings	Data	4	8	2	0
Fao		Cost per hour	Data				
Fap		Cost donated time	Fan*Fao				
Faq	Total	Hours in meetings		40	85	16	0
		Fa+Fd+Fg+Fj+Fm+Fp+Ff+Fh+Fab+Fae+Fah+Fak+Fan					
Far		Cost per hour	Fas/Faq	24.50	23.13	25.00	0.00
Fas		Cost donated time	Faq*Far	980	1,966	400	0
Fat		Share to experiment	Data	1.000	1.000	1.000	1.000
Fau		Share to recruitment	Data	0.333	0.333	0.000	0.000
Fav		Cost donated time to experiment	Fas*[Fat*(1-Fau+Fau/Ca)]	735	1,475	400	0

Source: Data from CAPTC and calculations of the author.

Worksheet 12: In-time grants by VISTAs

Line	Donor	Quantity	Formula	1998	1999	2000	2001
VISTA							
Ga	Brey, Paul	Months of service	Data	0	0.120	0	0
Gb		Cost per month	Data				
Gc		Cost donated time	$Ga * Gb$				
Gd	Crawford, Leisa	Months of service	Data	0	3	4	0
Ge		Cost per month	Data				
Gf		Cost donated time	$Gd * Ge$				
Gg	Smith, Pamela	Months of service	Data	0	2.4	9	0
Gh		Cost per month	Data				
Gi		Cost donated time	$Gg * Gh$				
Gj	Trares, Rachel	Months of service	Data	2	0	0	0
Gk		Cost per month	Data				
Gl		Cost donated time	$Gj * Gk$				
Gm	Total VISTA	Months of service	$Ga + Gd + Gg + Gj$	2	6	13	0
Gn		Cost per month	Go / Gm	259	259	259	259
Go		Cost donated time	$Gm * Gn$	517	1,428	3,285	0
Gp		Share to experiment	Data	1.000	1.000	1.000	1.000
Gq		Share to recruitment	Data	0.757	0.757	0.000	0.000
Gr		Cost donated time to experimen	$Go * [Gp * (1 - Gq + Gq / Ca)]$	224	617	3,285	0

Source: Data from CAPTC and calculations of the author.

Worksheet 13: In-time grants by employees of CAPTC

Line	Donor	Quantity	Formula	1998	1999	2000	2001
CAPTC employees							
Gs	Dickson, Ken	Hours not billed to experiment	Data				
Gt	Heape, Mike	Hours not billed to experiment	Data				
Gu	Hill, Liz	Hours not billed to experiment	Data				
Gv	Hughes, Michelle	Hours not billed to experiment	Data				
Gw	Peled, Sam	Hours not billed to experiment	Data				
Gx	Powell, Leon	Hours not billed to experiment	Data				
Gy	Romero, Lorri	Hours not billed to experiment	Data				
Gz	Thomas, Letha	Hours not billed to experiment	Data				
Gaa	Toney, Sue	Hours not billed to experiment	Data				
Gab		Total hours		70.4	155.2	31.5	31
		Gs+Gt+Gu+Gv+Gw+Gx+Gy+Gz+					
Gac		Assumed cost per hour	Data	15	15	15	15
Gad		Cost donated time to experim	Gab*Gac	1,056	2,328	473	465
Gae		Total	Gr+Gad	1,280	2,945	3,758	465

Source: Data from CAPTC and calculations of the author.

Worksheet 14: Non-cash grants, Bank of Oklahoma

Line	Quantity	Formula	1998	1999	2000	2001
Ha	Birches, Angela	Data (Hours of service)	14	0	0	0
Hb	Blasi, Julie	Data (Hours of service)	0	0	28	14
Hc	Dougherty, Paul	Data (Hours of service)	45	70	0	0
Hd	Gallman, Linda	Data (Hours of service)	50	0	0	0
He	Judd, Dallas	Data (Hours of service)	6	0	0	0
Hf	Parker, Barbara	Data (Hours of service)	100	20	27	13
Hg	Total hours of service	Ha+Hb+Hc+Hd+He+Hf	215	90	55	27
Hh	Cost per hour	Hi/Hg	36.33	34.42	35	35
Hi	Cost donated time	Hg*Hh	7,811	3,098	1,925	945
Hj	Share to experiment	Data	1.000	1.000	1.000	1.000
Hk	Share to recruitment	Data	0.093	0.000	0.000	0.000
Hl	Cost donated time to experiment	Hi*[Hj*(1-Hk+Hk/Ca)]	7,266	3,098	1,925	945
Hm	Changes to MIS	Data	1,500	0	0	0
Hn	Waived fees	Data	0	7,585	25,260	13,135
Ho	Total BOK	Hl+Hm+Hn	8,766	10,683	27,185	14,080

Source: Data from CAPTC and calculations of the author.

Worksheet 15: Non-cash grants from Dick Jackson and interns

Line	Donor	Quantity	Formula	1998	1999	2000	2001
Jackson, Dick							
Ia	Help with recruitment	Hours of service	Data	10	40	0	0
Ib		Cost per hour	Data				
Ic		Cost of grant	$Ia \cdot Ib$				
Id		Share to experiment	Data	1.000	1.000	1.000	1.000
Ie		Share to recruitment	Data	1.000	1.000	0.000	0.000
If		Cost of grant to experime	$Ic \cdot [Id \cdot (1 - Ie + Ie/Ca)]$	63	250	0	0
Ig	Retirement seminars	Hours of service	Data	0	50	30	15
Ih		Cost per hour	Data				
Ii		Cost of grant	$Ig \cdot Ih$				
Ij		Share to experiment	Data	1.000	1.000	1.000	1.000
Ik		Share to recruitment	Data	0.000	0.000	0.000	0.000
Il		Cost of grant to experime	$Ii \cdot [Ij \cdot (1 - Ik + Ik/Ca)]$	0	1,250	750	375
Interns							
Im	Agostini, Sabina	Hours of service	Data				
In	Herron, Sharon	Hours of service	Data				
Io	Lindsey, Matt	Hours of service	Data				
Ip	Patterson, Marcia	Hours of service	Data				
Iq		Cost per hour	Data				
Ir		Cost of grant	$Iq \cdot (Im + In + Io + Ip)$	6,000	3,240	384	120
Is		Share to experiment	Data	1.000	1.000	1.000	1.000
It		Share to recruitment	Data	0.757	0.757	0.000	0.000
Iu		Cost of grant to experime	$Ir \cdot [Is \cdot (1 - It + It/Ca)]$	2,594	1,400	384	120

Source: Data from CAPTC and calculations of the author.

Worksheet 16: Non-cash grants from other private people and firms

Line	Donor	Quantity	Formula	1998	1999	2000	2001
Other private donors							
Iv	PK Promotions	Publicity design	Data	250	1,000	0	0
Iw		Billboard ads	Data	17,500	17,500	0	0
Ix		Newspaper ads	Data	800	0	0	0
Iy		Cost of grant	$Iv+Iw+Ix$	18,550	18,500	0	0
Iz		Share to experiment	Data	1.000	1.000	1.000	1.000
Iaa		Share to recruitment	Data	1.000	1.000	0.000	0.000
Iab		Cost of grant to experime	$Iy*[Iz*(1-Iaa+Iaa/Ca)]$	4,638	4,625	0	0
Iac	Hartmann Communication	Publicity design	Data	2,000	4,000	0	0
Iad		Share to experiment	Data	1.000	1.000	1.000	1.000
Iae		Share to recruitment	Data	1.000	1.000	0.000	0.000
Iaf		Cost of grant to experime	$Iac*[Iad*(1-Iae+Iae/Ca)]$	500	1,000	0	0
Iag	Sherry Morris	Teach class on job hunting	Data	0	0	60	60
Iah	Becky Williams	Share to experiment	Data	1.000	1.000	1.000	1.000
Iai		Share to recruitment	Data	0.000	0.000	0.000	0.000
Iaj		Cost of grant to experime	$Iag*[Iah*(1-Iai+Iai/Ca)]$	0	0	60	60
Iak	Greenwood Chamber	Microenterprise training	Data	0	0	460	0
Ial	of Commerce	Share to experiment	Data	1.000	1.000	1.000	1.000
Iam		Share to recruitment	Data	0.000	0.000	0.000	0.000
Ian		Cost of grant to experime	$Iak*[Ial*(1-Iam+Iam/Ca)]$	0	0	460	0
Iao		Total	$If+Il+Iu+Iab+Iaf+Iaj+Iai$	7,794	8,525	1,654	555

Source: Data from CAPTC and calculations of the author.

Worksheet 17: Non-cash grants from the federal government

Line	Item	Quantity	Formula	1998	1999	2000	2001
Compensation for VISTAs							
Ja	Brey, Paul	Months of service	Ga	0	0.120	0	0
Jb		Cost per month	Data	1,408	1,408	1,408	1,408
Jc		Cost donated time	Ja*Jb	0	169	0	0
Jd	Crawford, Leisa	Months of service	Gd	0	3	4	0
Je		Cost per month	Jb	1,408	1,408	1,408	1,408
Jf		Cost donated time	Jd*Je	0	4,224	5,632	0
Jg	Smith, Pamela	Months of service	Gg	0	2.4	9	0
Jh		Cost per month	Jb	1,408	1,408	1,408	1,408
Ji		Cost donated time	Jg*Jh	0	3,379	12,250	0
Jj	Trares, Rachel	Months of service	Gj	2	0	0	0
Jk		Cost per month	Jb	1,408	1,408	1,408	1,408
Jl		Cost donated time	Jj*Jk	2,816	0	0	0
Jm	Total VISTA	Cost donated time	Jc+Jf+Ji+Jl	2,816	7,772	17,882	0
Jn		Share to experiment	Data	1.000	1.000	1.000	1.000
Jo		Share to recruitment	Data	0.757	0.757	0.000	0.000
Jp		Cost donated time to experiment	Jm*[Jn*(1-Jo+Jo/Ca)]	1,217	3,360	17,882	0
Public-service announcements							
Jq		Television	Data	27,000	27,000	0	0
Jr		Radio	Data	3,900	1,200	0	0
Js		Cost	Jq+Jr	30,900	28,200	0	0
Jt		Share to experiment	Data	1.000	1.000	1.000	1.000
Ju		Share to recruitment	Data	1.000	1.000	0.000	0.000
Jv		Cost to experiment	Js*[Jt*(1-Ju+Ju/Ca)]	7,725	7,050	0	0
Jw		Total	Jp+Jv	8,942	10,410	17,882	0

Source: Data from CAPTC and calculations of the author.

Worksheet 18: Non-cash grants from state and local governments

Line	Quantity	Formula	1998	1999	2000	2001
Oklahoma State Extension Service						
Ka	Classroom space	Data	250	1,000	333	113
Kb	Printed materials	Data	200	800	200	100
Kc	Teaching and curriculum development	Data	1,060	4,240	200	0
Kd	Cost	$Ka+Kb+Kc$	1,510	6,040	733	213
Ke	Share to experiment	Data	1.000	1.000	1.000	1.000
Kf	Share to recruitment	Data	0.000	0.000	0.000	0.000
Kg	Cost to experiment	$Kd*[Ke*(1-Kf+Kf/Ca)]$	1,510	6,040	733	213
Tulsa Housing Authority						
Kh	Cost donated time	Data	375	1,500	0	0
Ki	Share to experiment	Data	1.000	1.000	1.000	1.000
Kj	Share to recruitment	Data	1.000	1.000	0.000	0.000
Kk	Cost to experiment	$Kh*[Ki*(1-Kj+Kj/Ca)]$	94	375	0	0
Dept. of Urban Development, City of Tulsa						
Kl	Cost donated time	Data	0	480	160	80
Km	Share to experiment	Data	1.000	1.000	1.000	1.000
Kn	Share to recruitment	Data	0.000	0.000	0.000	0.000
Ko	Cost to experiment	$Kl*[Km*(1-Kn+Kn/Ca)]$	0	480	160	80
Kp	Total cost to experiment	$Kg+Kk+Ko$	1,604	6,895	893	293

Source: Data from CAPTC and calculations of the author.

Worksheet 19: Total resource use (cost), Part I

Line	Donor	Form	Formula	1998	1999	2000	2001
Private							
L _a	CFED	Cash	Ec+Ed+Eh+Ei	0	17,260	102,391	46,801
L _b		Non-cash	Data	0	0	0	0
L _c		Total	La+Lb	0	17,260	102,391	46,801
L _d	BOk/Kaiser	Cash	Em+En	0	750	(416)	1,547
L _e		Non-cash	Ho	8,766	10,683	27,185	14,080
L _f		Total	Ld+Le	8,766	11,433	26,769	15,627
L _g	Zarrow	Cash	Er+Es	0	0	2,837	2,886
L _h		Non-cash	Data	0	0	0	0
L _i		Total	Lg+Lh	0	0	2,837	2,886
L _j	CAPTC	Cash	Ew+Ex	0	0	0	0
L _k		Non-cash	Gae	1,280	2,945	3,758	465
L _l		Total	Lj+Lk	1,280	2,945	3,758	465
L _m	VISTAs	Non-cash	Gr	224	617	3,285	0
L _n	Working group	Non-cash	Fav	735	1,475	400	0
L _o	Other private	Non-cash	Iao	7,794	8,525	1,654	555
L _p	Total private	Cash	La+Ld+Lg+Lj	0	18,010	104,812	51,234
L _q		Non-cash	Lb+Le+Lh+Lk+Lm+Ln+Lo	18,798	24,246	36,282	15,100
L _r		Total	Lp+Lq	18,798	42,255	141,093	66,334

Source: Data from CAPTC and calculations of the author.

Worksheet 20: Total resource use (cost), Part II

Line	Donor	Form	Formula	1998	1999	2000	2001
Federal government							
Ls	CSBG	Cash	Eab+Eac	12,309	35,557	84,498	63,377
Lt		Non-cash	Data	0	0	0	0
Lu		Total	Ls+Lt	12,309	35,557	84,498	63,377
Lv	CDBG	Cash	Eag+Eah	10,235	44,585	54,890	21,515
Lw		Non-cash	Data	0	0	0	0
Lx		Total	Lv+Lw	10,235	44,585	54,890	21,515
Ly	HOME	Cash	Eal+Eam	0	0	6,558	5,742
Lz		Non-cash	Data	0	0	0	0
Laa		Total	Ly+Lz	0	0	6,558	5,742
Lab	AHP	Cash	Eaq+Ear	0	0	3,463	10,381
Lac		Non-cash	Data	0	0	0	0
Lad		Total	Lab+Lac	0	0	3,463	10,381
Lae	NRC	Cash	Eau+Eav	0	0	0	9,019
Laf		Non-cash	Data	0	0	0	0
Lag		Total	Lae+Laf	0	0	0	9,019
Lah	Fannie Mae	Cash	Eba+Ebb	0	0	26,415	0
Lai		Non-cash	Data	0	0	0	0
Laj		Total	Lah+Lai	0	0	26,415	0
Lae	VISTAs	Cash	Jp	1,217	3,360	17,882	0
Laf	Public-service ads	Non-cash	Jw	8,942	10,410	17,882	0
Total federal government							
Lag		Cash	Ls+Lv+Ly+Lab+Lae+Lah+Lae	23,760	83,502	193,706	110,033
Lah		Non-cash	Lt+Lw+Lz+Lac+Laf+Lai+Laf	8,942	10,410	17,882	0
Lai		Total	Lag+Lah	32,703	93,911	211,587	110,033

Source: Data from CAPTC and calculations of the author.

Worksheet 21: Total resource use (cost), Part III

Line	Donor	Form	Formula	1998	1999	2000	2001
State and local government							
Laj	(none)	Cash	Ebg+Ebh	0	0	0	0
Lak		Non-cash	Data	0	0	0	0
Lal		Total	Laj+Lak	0	0	0	0
Lam	OSU Extension	Non-cash	Kg	1,510	6,040	733	213
Lan	Urban. Dev.	Non-cash	Kk	94	375	0	0
Lao	Tulsa Housing Auth.	Non-cash	Ko	0	480	160	80
Total state and local government							
Lap		Cash	Laj	0	0	0	0
Laq		Non-cash	Lak+Lam+Lan+Lao	1,604	6,895	893	293
Lar		Total	Lap+Laq	1,604	6,895	893	293
Total resource use (cost)							
Las		Cash	Lp+Lag+Lap	23,760	101,512	298,517	161,267
Lat		Non-cash	Lq+Lah+Laq	29,344	41,550	55,056	15,393
Lau		Total	Las+Lat	53,104	143,062	353,574	176,660

Source: Data from CAPTC and calculations of the author.

Worksheet 22: Cost per unit of output

Line	Quantity	Formula	1998	1999	2000	2001
Outputs						
In a year						
Ma	Enrollments	Data	0	261	208	2
Mb	Participant-months	Data	0	1,583	5,091	2,662
Mc	Net deposits	Data	0	52,061	145,910	73,119
Md	Dollar-months saved	Data	0	283,402	1,722,892	1,462,244
Cumulative						
Me	Enrollments	Me(t-1)+Ma	0	261	469	471
Mf	Participant-months	Mf(t-1)+Mb	0	1,583	6,674	9,336
Mg	Net deposits	Mg(t-1)+Mc	0	52,061	197,971	271,090
Mh	Dollar-months saved	Mh(t-1)+Md	0	283,402	2,006,294	3,468,538
Costs						
In a year						
Mi	Operations	Lau	53,104	143,062	353,574	176,660
Mj	Matches	Ebl	0	7,642	65,757	57,635
Mk	Cost net of matches	Mi-Mj	53,104	135,420	287,817	119,025
Cumulative						
Ml	Operations	Ml(t-1)+Mk	53,104	188,524	476,341	595,366
Cost per unit of output						
In a year						
Mm	Enrollments	Mi/Ma	NA	548	1,700	NA
Mn	Participant-months	Mi/Mb	NA	90	69	66
Mo	Net deposits	Mi/Mc	NA	2.75	2.42	2.42
Mp	Dollar-months saved	Mi/Md	NA	0.50	0.21	0.12
Cumulative						
Mq	Enrollments	Ml/Me	NA	722	1,016	1,264
Mr	Participant-months	Ml/Mf	NA	119	71	64
Ms	Net deposits	Ml/Mg	NA	3.62	2.41	2.20
Mt	Dollar-months saved	Ml/Mh	NA	0.67	0.24	0.17

Source: Data from CAPTC and calculations of the author